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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/575,286	04/26/2006	James Wells Carter	62941A	3416
35503 7590 09/02/2009 Union Carbide Chemicals and Plastics Technology Corporation P.O. Box 1967 Midland, MI 48641-1967				
EXAMINER				
SELLERS, ROBERT E				
ART UNIT		PAPER NUMBER		
1796				
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09/02/2009		PAPER		

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/575,286

Applicant(s)

CARTER ET AL.

Examiner

ROBERT SELLERS

Art Unit

1796

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 24 June 2009.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-9 is/are pending in the application.
- 4a) Of the above claim(s) 1, 4 and 7-9 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1, 3, 5 and 6 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/CDC)
- 4) ☐ Interview Summary (PTO-413)
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____
- Paper No(s)/Mail Date _____

1. The election of Group I and the first formula depicted on page 8, line 8 of the specification in the non-Final rejection mailed March 24, 2009 is acknowledged.

The election has been treated as an election without traverse because applicant did not distinctly and specifically point out the supposed errors in the restriction requirement (MPEP § 818.03(a)).

2. Claims 2 and 7-9 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to nonelected inventions, there being no allowable generic or linking claim. Claim 4 is withdrawn as directed to a nonelected formula of the cyclohexyl-linked bis(epoxycyclohexane).

3. The 35 U.S.C. 112, first and second paragraphs, rejections are withdrawn since the support for the G₁ to G₂₉ groups in the formula of claim 1 is found on page 3, lines 14-15; page 4, lines 7-9 and page 8, lines 3-4 of the specification. However, it would be preferable for the sake of clarity if the groups are identified directly under the formulae depicted on page 2, lines 17-18 and page 7, lines 28-29.

4. The term "may be" used to indicated the R₁ and R₂ substituents in the formula of claim 1 in line 6 would be more concisely denoted as "are."

The text of sections 102(b) or (e) and 103(a) of Title 35, U.S. Code not included in this action can be found in the non-Final rejection.

Claims 1, 3, 5 and 6 are rejected under 35 U.S.C. 102(b) as being anticipated by Nishida et al.

The rejection is maintained for the reasons of record set forth in the non-Final rejection. The arguments filed June 24, 2009 have been considered but are unpersuasive.

5. Nishida et al. in Table 1, Example 4 shows a composition prepared from 30.8% by weight of crosslinking agent (B-4) derived from an epoxycyclohexyldiester monool and tetramethylxylene diisocyanate (col. 14, item (7)), lines 50-68) within the claimed formula as depicted in columns 9-10, the fifth formula).

Claims 1 and 6 are rejected under 35 U.S.C. 102(b or e) as being anticipated by European Patent No. 479,166 (European '166, 102(b)) or Woods et al. Patent No. 6,916,890 (102(e)).

The rejection is maintained for the reasons of record set forth in the non-Final rejection. The arguments filed June 24, 2009 have been considered but are unpersuasive.

6. The European patent in Example 29 on page 24 shows a composition comprising the Example 6 product containing 53.9% (98.0% of the Example 6 product x 55% of diepoxide as exhibited in Example 6 on page 18, line 49 to page 19, line 38 and 0.2% of a photoinitiator.

7. Woods et al. in column 21, Table 1 shows 41.7% of ECCD(3)) (col. 19, Example 2) within the claimed formula wherein R₁ and R₂ are -O-C(=O)- and G₁ to G₂₉ are hydrogen.

Claims 1, 3, 5 and 6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rickert et al. Patent No. 6,437,045; the Journal of Polymer Science: Part A: Polymer Chemistry article by Wang et al., Ober et al. Patent No. 5,948,922 and European Patent No. 51,311 (European '311).

The rejections involving Rickert et al., Wang et al., Nishida et al. and Ober et al. have been converted from 35 U.S.C. 102(b) rejections in response to the newly claimed composition comprising from about 25 wt% to 100 wt% of the cyclohexyl-linked bis(epoxycyclohexane) of the formula. Otherwise, the rejection is maintained for the reasons of record set forth in the non-Final rejection. The arguments filed June 24, 2009 have been considered but are unpersuasive.

8. Rickert et al. in column 7, lines 8-11 discloses an epoxy:carboxyl groups ratio of as high as 2:1, thereby overlapping the claimed proportion of the cyclohexyl-linked bis(epoxycyclohexane) of the formula. There is no evidence of record distinguishing the claimed proportions over the closest prior art amount shown in column 17, Table 11, Formulation V.

9. There cycloaliphatic diepoxides of Wang et al. are mixed with hexahydro-4-methylphthalic anhydride HMPA in a mole ratio of 1:0.8 as described on page 2996 under the section entitled "Preparation of epoxy encapsulants." There is no showing establishing the criticality of the claimed proportions over the closest prior art level set forth in Wang et al.

10. Ober et al. in column 24, lines 52-55 sets forth from 20% to 83.3% by weight of a cycloaliphatic diepoxide including a Class III compound of structural formula (VII) represented in column 4, lines 36-46, thereby overlapping the proportions. There is no evidence of record confirming the patentability of the claimed range over the closest prior art amount shown in Example IX in column 33.

11. European '311 on page 18, Table 1 shows contents of cycloaliphatic diepoxides of 50.2% by weight. Although a cycloaliphatic diepoxide within the claimed formula is not represented, it would have been obvious to employ the cycloaliphatic diepoxide of European '311 of the formula on page 3, lines 1-17 wherein R is cyclohexane (lines 16-17) in view of the equivalency between the exemplified and disclosed species established on page 3.

12. The claimed coating process does not require the presence of a photoinitiator or thermally-activated initiator. Claim 7 defining it is a separate invention directed to the composition. The introduction of an initiator to the coating process would constitute a distinct invention requiring further consideration and search. Any claims directed to a coating process wherein the composition further comprises a photoinitiator or thermally-activated initiator can only be pursued in a continuing application wherein a particular species thereof must be elected.

The amendment necessitated the new grounds of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL** (MPEP § 706.07(a)). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

(571) 272-1093 (Fax No. (571)-273-8300)
Monday to Friday, 9:30 to 6:00

/Robert Sellers/
Primary Examiner
Division 1796

rs
8/31/2009